

EG. Melikyan

3344

21 3
THE INTERNAL COMPTON EFFECT E. G. Melikyan
(Moscow State Univ.) Soviet Phys. JETP 4, 930-1 (1957)
July.

A general formula is derived for the relative probability of the Compton effect for both magnetic and electric transitions in the Born approximation, and numerical calculations are carried through for some specific cases. (L.T.W.)

OK //

AUTHOR MELIKYAN E.G. PA - 2698
TITLE The Interior COMPTON Effect on the Occasion of Conversion in Pairs.
(Vnutrennyy Kompton-effekt pri parnoy konversii - Russian)
PERIODICAL Zhurnal Eksperim. i Teoret.Fiziki, 1957, Vol 32, Nr 2, pp 384-385 (USSE)
Received 5/1957 Reviewed 6/1957

ABSTRACT If the energy of the transition of a nucleus from an excited state into the ground state is greater than $2mc$, (m - mass of the electron) (according to the reviewers' opinion this ought to be mc^2 and not mc !), a discharge of the nucleus is possible on the occasion of which an electron-positron-pair is produced and a γ quantum is radiated. Such a process may be described as an interior COMPTON effect with conversion in pairs. Next, formulae for the relative differential probability of this effect (in BORN'S approximation) are given. This differential relative probability is the ratio: absolute probability of the interior COMPTON effect on the occasion of conversion in pairs probability of radiation transition of this nucleus. The FEYNMAN graphs of the processes investigated here are analogous to the FEYNMAN graphs of the COMPTON effect on atomic electrons. The rather voluminous formulae of this relative differential probability are explicitly given for the magnetic total $2j$ -transition and for the electric total $2j$ -transition. In the extremely relativistic case these formulae are simplified considerably. In this case the same expression is obtained for magnetic and for electric transition. For the ratio of the differential probability of the interior COMPTON effect with respect to the probability of the conversion of gamma rays with forming of

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The Interior COMPTON Effect on the Occasion of Conversion in Pairs.

PA - 2698

pairs the following formula is obtained in rough approximation:

$$d\gamma_j/d\beta_j = (\alpha/2\pi) kdk/(\Delta E - k)^2. \quad \Delta E - k \gg m.$$

ASSOCIATION Moscow State University
PRESENTED BY
SUBMITTED 30.10.1956
AVAILABLE Library of Congress
Card 2/2

ABAGYAN, G.V.; BAYATYAN, G.L.; MATOYAN, D.S.; MELIKYAN, E.G.

Semiautomatic computer of second differences. Prib. i tekhn. eksp.
no. 4: 131-132 J1-Ag '60. (MIRA 13:9)

1. Yerevanskiy gosudarstvennyy universitet.
(Calculating machines)

86758

S/120/60/000/006/034/045
E032/E314

21,5200 (1033, 1191, 1349)

AUTHORS: Gasparyan, L.G., Matoyan, D.S. and Melikyan, E.G.

TITLE: A Reflected-light Illuminator for Use in Scanning
Thick Photographic Emulsions

PERIODICAL: Pribery i tekhnika eksperimenta, 1960, No. 6.
p. 121

TEXT: In following long tracks of relativistic particles in thick photographic emulsions, considerable eye strain is involved on account of the apparent low contrast of the image. In order to increase this contrast, the present authors have used a reflected-light illuminator (type OW-21 (OI-21)). This illuminator is shown in Fig. 1. The latter has the disadvantage that light reflected from various parts of it, as well as the light coming from the object, enters the eyepiece. The light is largely reflected from the end of the drive 1 and the lenses of the objective 2 (Fig. 1). These disadvantages were removed by the following modifications. The drive 3 is replaced by the hollow tube 4 whose inner surface is coated with a black matt paint (Fig. 2). The light

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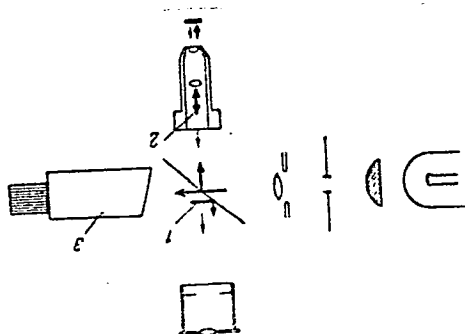
**A Reflected-light Illuminator for Use in Scanning Thick
Photographic Emulsions**

reflected from the objective is reduced by using a ring-shaped aperture 5 in the light source. The external diameter of this ring is chosen so that its projection onto the objective is equal to the diameter of the top lens of the latter, while the inner diameter is chosen so as to obtain the maximum contrast. The distance between the illuminator and the microscope lies between 25 and 30 cm and the image of the track is then obtained in the form of bright points of light (silver grains) against a dark background. This method can also be used to study the surfaces of metals and biological specimens. Sometimes, it is convenient to make the inner disc 7 adjustable so that different effects of illumination can be obtained.

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A Reflected-light Illuminator for Use in Scanning Thick
Photographic Emulsions

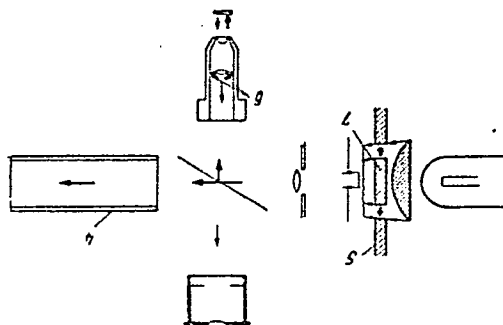


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S/120/60/000/006/034/045
E032/E314

A Reflected-light Illuminator for Use in Scanning Thick
Photographic Emulsions



There are 2 figures.

ASSOCIATION: Yerevanskiy gosudarstvennyy universitet
Card 4/4 (Yerevan State University)

SUBMITTED: October 6, 1959

MELIKYAN, E.G.

Current distribution in a pentode. Izv. vys. ucheb. zav.;
radiotekhn. 5 no.4:530-531 J1-Ag '62. (MIRA 16:6)

1. Rekomendovano kafedrov radiofiziki Yerevanskogo gosudarstvennogo universiteta.
(Electron tubes)

L 45446-66 EWT(d) IJP(c)

ACC NR: AR6017334 SOURCE CODE: UR/0044/66/000/001/B047/B047

23

AUTHOR: Melikyan, E. G.

16

B

TITLE: Determination of the limiting cycle of a nonlinear differential equation

SOURCE: Ref. zh. Matematika, Abs. 1B211

REF SOURCE: Uch. zap. Yerevansk, un-t, v. 93, 1964, 3-4

TOPIC TAGS: differential equation, Taylor series, *NONLINEAR DIFFERENTIAL EQUATION*

ABSTRACT: Suppose that $\rho(\theta; r, \varphi)$ is the solution of the equation

$$d\rho/d\theta = \psi(\rho, \theta) \quad (1)$$

with the initial condition that $\rho = r$ while $\theta = \varphi$. The author suggests that the limiting cycle $r(\varphi)$ be determined from the equation

$$\psi(\rho(\varphi + t; r, \varphi); \varphi + t) |_{t=2\pi} = \psi(r, \varphi) \quad (2)$$

by expanding the left side into a Taylor series in terms of t (recorded symbolically) and finding the derivatives at $t = 0$ from equation (1). Reviewer's comment: If

Card 1/2

UDC: 5 7.917

L 45146-66

ACC NR: AR6017334

0

$\partial\phi/\partial\rho$ changes its sign, equation (2) can also be satisfied by other than limiting cycles. A. Filippov. [Translation of abstract]

[KP]

SUB CODE: 12/ SUBM DATE: none/

LS
Card 2/2

MELIKYAN, G.

MELIKYAN, G., inzhener; POGOSYAN, G., inzhener; KAFADARYAN, I., inzhener.

Large-block construction using natural stone in Armenia. Gor.1
sel'.stroil. no.7:3-4 Jl '57. (MLRA 10:10)

(Armenia--Building blocks)

MELIKYAN, G.M.

Distribution of watering places in Alpine summer pastures of
Agnagan. Izv.AN Arm.SSR,Biol.i sel'khoz.nauki. 4 no.7:623-631
'51. (MLBA 9:8)

1. Yerevanskiy sel'skokhozyaystvennyy institut.
(Agnagan Range--Water supply, Rural)

RAD'KO, Aleksandr Fedorovich; MELIKYAN, Georgiy Melikovich; ORLOVA, V.P.,
redaktor; PAVLOVA, M.M., tekhnicheskiy redaktor

[Irrigation and water supply for mountain pastures] Obvodnenie i
vodosnabzhenie gornyykh pastbishch. Moskva, Gos. izd-vo selkhoz.
lit-ry, 1956. 99 p. (MLRA 10:1)
(Pastures and meadows) (Water supply, Rural)

MELIKYAN, G.M.

Hydraulic characteristics of automatic waterers. Izv. AN Arm.SSR.Biol.
i sel'khoz.nauki 9 no.6:101-107 J. '56. (MLRA 9:9)
(Water supply, Rural)

~~MELIKYAN G. K.~~

Calculating the discharge of water through automatic waterers and the percentage of simultaneously used waterers. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 11 no. 5:101-106 My '58. (MIRA 11:7)

1. Armanyskiy sel'skokhozyaystvennyy institut.
(Cattle--Watering)

~~MELIKYAN, G. G.~~ TER-MURCHYAN, K.A.

Central heating systems based on "overheated water". Izv. AN Arm.
SSR, Ser. FIZM tekhn. nauk 9 no.10:87-101 '56. (HLEBA 10:4)

1. Yerevanskiy politekhnicheskii institut imeni K. Marksa.
(Hot-water heating)

TER-MKRTCHYAN, K.; MELIKYAN, G. O.

Selecting rated outside temperature of air for heating systems
in Armenia. Prom.Arm. 4 no.5:58-61 My '61. (MIRA 14:8)

1. Nauchno-issledovatel'skiy sektor Yerevanskogo politekhnicheskogo
instituta.

(Hot-air heating) (Armenia--Atmospheric temperature)

MELIKYAN, M. M.

Dissertation: "Natural Forage Lands of the Vardenin Mountain Range (Armenian SSR) and Basic Measures for Their Improvement and Efficient Utilization." Cand Agr Sci, Yerevan Zooveterinary Inst, 19 Jun 54. (Kommunist, Yerevan, 6 Jun 54)

SO: SUM 318, 23 Dec 1954

SYNTHESIS AND PROPERTIES INDEX									
1ST AND 2ND CROSS					3RD AND 4TH CROSS				
Synthesis of substituted γ-acetylbutyric acids. G. T. Tatevosyan and M. O. Melikyan (Chem. Inst. Armenian SSR Acad. Sci.)—<i>J. Gen. Chem. (U.S.S.R.)</i> 17, 975-80 (1947).—<i>Di-Et benzyl(3-chloro-2-butenyl)malonate</i>, b_p 130-5°, d_4^{20} 1.0500, n_D^{20} 1.4587, was prepd. in 82% yield by addn. of 81 g. $\text{ClCH}_2\text{CH}=\text{CClMe}$ slowly to $\text{BuCN}(\text{CO}_2\text{Et})_2$ (from 15 g. Na, 168 g. abs. EtOH, and 140 g. $\text{BuCH}(\text{CO}_2\text{Et})_2$), followed by refluxing 4 hrs., distn. of the EtOH, addn. of dil. HCl to dissolve the NaCl ppt., sepn. of the org. layer, and extra. of the aq. layer with $(\text{CH}_2\text{Cl})_4$. The ester (60 g.), 23.9 g. NaOH, and 300 cc. 95% EtOH were refluxed 3 hrs., dild. with 100 cc. H_2O, and freed of EtOH by distn.; the cooled mixt. treated with 90 g. 25% HCl and filtered, gave 66.07% $\text{MeCCl}:\text{CHCH}=\text{CH}(\text{CO}_2\text{H})_2$, m. 129° (from H_2O). The latter (28.1 g.) heated on a free flame, followed by distn., gave 80.1% <i>benzyl(3-chloro-2-butenyl)acetic acid</i>, b_p 134-6°, d_4^{20} 1.0417, n_D^{20} 1.4671, a viscous oil, insol. in H_2O. This (15 g.) was treated, with ice cooling and stirring, with 18.7 g. concd. H_2SO_4 and the mixt. was allowed to stand 2 days with occasional shaking; on cooling and addn. of 25 cc. H_2O and 18.7 g. K_2CO_3, followed by extra. with EtOH and distn., there was obtained 85.3% α-<i>benzyl-γ-acetylbutyric acid</i>, b_p 147-9°, d_4^{20} 1.0102, n_D^{20} 1.4525; semicarbazone m. 135-40° (from H_2O). $\text{ClCH}_2\text{CH}=\text{CClMe}$ (74.32 g.) with iso-AmCN(CO₂Et)₂ (from 13.7 g. Na, 136.75 g. iso-AmCN(CO₂Et)₂), and 154 g. abs. EtOH gave 70.3% <i>di-Et benzyl(3-chloro-2-butenyl)malonate</i>, b_p 158-60°, d_4^{20} 1.0322, n_D^{20} 1.4550. This (3 g.), hydrolyzed by 3 g. KOH in 25 cc. H_2O, gave 52% <i>benzyl(3-chloro-2-butenyl)malonic acid</i>, m. 145-6° (from H_2O), insol. in cold H_2O. Thermal decompn. of this gave 80.3% <i>isoamyl(3-chloro-2-butenyl)acetic acid</i>, b_p 143-4°, m. 22-4°. This (8.25 g.) was hydrolyzed by 0.6 cc. concd. H_2SO_4, as described above, to give 80.4% α-<i>isoamyl-γ-acetylbutyric acid</i>, b_p 170°, d_4^{20} 0.9902, n_D^{20} 1.4513; semicarbazone m. 152-4° (from water). $\text{ClCH}_2\text{CH}=\text{CClMe}$ (66 g.) with PhCH₂CN(CO₂Et)₂ (from 117.7 g. PhCH₂CH(CO₂Et)₂, 11 g. Na, and 120 g. EtOH) gave 90.1% <i>di-Et benzyl(3-chloro-2-butenyl)malonate</i>, b_p 185-6°, d_4^{20} 1.1176, n_D^{20} 1.5092. This (50 g.) was hydrolyzed by 13 g. NaOH in 250 cc. EtOH to give 42.27% <i>benzyl(3-chloro-2-butenyl)malonic acid</i>, m. 142-3° (from H_2O). Thermal decompn. gave 84.43% <i>benzyl(3-chloro-2-butenyl)acetic acid</i>, b_p 195-7°, d_4^{20} 1.1361, n_D^{20} 1.5265 (oxidation by alk. KMnO₄ at room temp. gave benzylsuccinic acid, m. 158-60°); 8 g. of this with 6 cc. 84.5% H_2SO_4 gave 85.64% α-<i>benzyl-γ-acetylbutyric acid</i>, m. 63-4°, b_p 192-5°; semicarbazone m. 183-5° (from EtOH). G. M. Kozlov									

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CA

Isomeric transformations of methylcyclobutylcarbinol.
G. T. Tatevosyan, M. O. Melikyan, and A. T. Terzyan.
J. Gen. Chem. (U.S.S.R.) 17, 981-6(1947).—The sole
product of dehydration of methylcyclobutylcarbinol (I)
by means of cryst. (CO₂H)₂ is 1-methylcyclopentene;
the same product is formed also by dehydrohalogenation
of the bromide of the carbinol by quinoline. I was prepd.
by reduction of acetylcyclobutane (from the vapor re-
action of AcOH and cyclobutanecarboxylic acid over MnO
at 410-20°) with Na in moist Et₂O; 1, b.p. 136-0°, d₄²⁰
0.8074, n_D²⁰ 1.4443. I (12.7 g.) heated with 39 g. cryst.
(CO₂H)₂ in a distn. flask gave 43.3% 1-methylcyclop-
ene, b.p. 70-1°, d₄²⁰ 0.7801, n_D²⁰ 1.4344, which instantly
decolorizes KMnO₄ and Br water and on oxidation by
KMnO₄ gives γ-acetylbutyric acid (hydrate, m. 34-6°;
semicarbazone monohydrate, m. 167-0°). I (7 g.)
was treated with cooling with 30 cc. HBr satd. at 0°;
after standing 24 hrs., the mixt. was boiled 25-30 min.,
cooled, dil. with H₂O, and extd. with Et₂O to give
61.5% I bromide, b.p. 74-8°, d₄²⁰ 1.3004, n_D²⁰ 1.4823,
which acquires a blue-violet color on standing. Heating
17 g. bromide with 26 g. quinoline to 120-30°, and finally
to 190-200°, gave 79.2% 1-methylcyclopentene.
G. M. Kosolapoff

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

RESEARCH DIVISION

SECTION

GROUP

SUBGROUP

ITEM

DATE

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REMARKS

10

CA
1487

Synthesis of 1-methyl-4-alkyl-1-cyclohexen-3-ones. M. O. Melikyan and G. T. Tatevtsyan. *Zhur. Obshch. Khim.* (J. Gen. Chem.) 21, 686-700 (1951). To the Na-derivative of $\text{AcCH}(\text{CHMe})\text{CO}_2\text{Et}$ from 80 g. of the ester, 10 g. Na, and 114 g. abs. EtOH, was added with cooling 85.6 g. $\text{MeCCl}_2\text{CHCl}_2$; acidification and extr. with CHCl_3 after 3 days yielded 27.75% Et α -isopropyl- α -chloroacrylate, (I), b. 124.7°, d_4^{20} 1.0715, n_D^{20} 1.4720; this (10.1 g.) treated, dropwise, with ice cooling, with 9.6 ml. H_2SO_4 (d. 1.78), let stand 2 days, and treated with 15.4 ml. H_2O and 15.7 g. Na_2CO_3 gave 63.1% 1-methyl-4-isopropyl-4-carbomethoxy-1-cyclohexen-3-one, b. 141-4°, d_4^{20} 1.0988, n_D^{20} 1.4838 (cf. Walker, C. 1, 30, 1012°). A small amt. of 1-methyl-4-isopropyl-4-cyclohexen-3-one, b. 102-4°, also forms; this is obtained in 62% yield on refluxing the ester 12 hrs. with MeOH-KOH . The pure product, b. 111-14°, d_4^{20} 0.9415, n_D^{20} 1.4811 (oxime, m. 117-18°), is identical with naturally occurring dl-piperitone. Oxidation by alk. KMnO_4 gives $\text{AcCH}_2\text{CH}_2\text{CH}(\text{CHMe})\text{CO}_2\text{H}$, isolated as the semicarbazone, m. 150-7°. Similarly the Bu analog of I gave 72.5% Et α -butyl α -(3-chloroacrylate), b. 107-9°, d_4^{20} 1.0380, n_D^{20} 1.4658, hydrolyzed by aq. H_2SO_4 , as above to 62.7% 1-methyl-4-butyl-4-carbomethoxy-1-cyclohexen-3-one, b. 111.5-12.5°, d_4^{20} 1.0155, n_D^{20} 1.4780, which on refluxing with MeOH-KOH gave 47.2% 1-methyl-4-butyl-1-cyclohexen-3-one, b. 95-6°, d_4^{20} 0.9344, n_D^{20} 1.4790 (semicarbazone, m. 190-2°); oxidation with KMnO_4 gives $\text{AcCH}_2\text{CH}_2\text{CH}(\text{CHMe})\text{CO}_2\text{H}$, isolated as the semicarbazone, m. 130-40°, iso-AmCHAcCO₂Et similarly gave 53.2% Et α -isomethyl- α -(3-chloroacrylate), b. 110-18°, d_4^{20} 1.0202, n_D^{20} 1.4612, hydrolyzed to 55.5% 1-methyl-4-isomethyl-4-carbomethoxy-1-cyclohexen-3-one, b. 112-15°, d_4^{20} 1.0015, n_D^{20} 1.4768, which with KOH-MeOH gave 39.4% 1-methyl-4-isomethyl-1-cyclohexen-3-one, b. 84-6°, d_4^{20} 0.9100, n_D^{20} 1.4688. Similarly prep. were: Et α -benzyl α -(3-chloroacrylate) (73.2%), b. 140-8°, d_4^{20} 1.4245, n_D^{20} 1.5202; 1-methyl-4-benzyl-4-carbomethoxy-1-cyclohexen-3-one, (61.6%), b.p. unstated, m. 43-4° (from EtOH); 1-methyl-4-benzyl-1-cyclohexen-3-one, (74%), b. 125-7°, d_4^{20} 1.0307, n_D^{20} 1.5511 (semicarbazone, m. 180-90° (from EtOH)). Oxidation gave $\text{AcCH}_2\text{CH}_2\text{CH}(\text{CHMe})\text{CO}_2\text{H}$, b. 180-5°, m. 131-5°, G. M. K.

MELIKYAN-M.O.

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6-Chloro-5,7-nonadien-2-one. M. O. Melikyan and E. S. Galchyan (K. Marx Polytch. Inst. Akad. Nauk Armyan. S.S.R., Ser. Fiz.-Mat., Estestven. i Tekh. Nauk 8, No. 6, 55-8 (1955) (in Russian).—CICH₂CH:CCICH:CHMe and EtO₂CCHNaAc form EtO₂CCHAc:CH₂CH:CCICH:CHMe (I), b_p 127-30°, d₄ 1.1041, n_D²⁰ 1.4930, which hydrolyzed at room temp. with 10% NaOH and acidified forms Ac(CH₂)₂CH:CCICH:CHMe (II), b_p 92-4°, d₄ 1.03257, n_D²⁰ 1.4998; semicarbazide, m. 102-3°. II has a flowery odor and can be used in perfumery. Attempts to cyclize I and II with H₂SO₄ were not successful. John Howe Scott

Chen

PM

TATEVOSYAN, G.T.; TERZYAN, A.G.; MELIKYAN, M.O.

Mechanism of the reaction of sulfuric acid hydrolysis of
vinyl-type chlorides. Izv. AN Arm. SSR. Khim. nauki 18 no.3;
282-289 '65. (MIRA 18:11)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
Submitted April 27, 1964.

L 34102-66 EWT(m)/EWP(j)/T IJP(c) RM
ACC NR: AP6008710 SOURCE CODE: UR/0079/65/035/011/2020/2021

AUTHOR: Andrianov, K. A.; Astakhin, V. V.; Melikyan, M. O.; Mushegyan, N. G.;
Pyzhov, V. K.

32
B

ORG: none

TITLE: Synthesis of ethoxypolyorganosiloxanes

SOURCE: Zhurnal obshchey khimii, v. 35, no. 11, 1965, 2020-2021

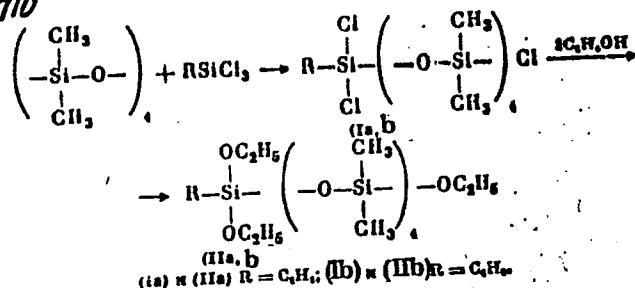
TOPIC TAGS: organosilicon compound, silane, siloxane

ABSTRACT: The telomerization¹ reaction of octamethylcyclotetrasiloxane¹ with phenyltri-chlorosilane and ethyltrichlorosilane was investigated. Since the telomerization reaction in the presence of catalysts is known to be complicated by side processes forming oligomer homologs instead of telomers, the experiments were carried out in glass ampoules, and in order to increase the conversion, the temperature was raised to 300C. The oligomers obtained were converted into ethoxy derivatives by the the action of alcohol in the presence of a hydrogen chloride acceptor. The reaction proceeds as follows:

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UDC: 547.1'128

L 34102-66
ACC NR: AP6008710



The new compounds 1-phenyl-1, 9-triethoxyoctamethylpentasiloxane and 1-ethyl-1, 1, 9-triethoxyoctamethylpentasiloxane were thus synthesized in yields of 45 and 41% respectively, and their physical properties were measured. Orig. art. has: 1 table.

SUB CODE: 07 / SUBM DATE: 20Jul64 / ORIG REF: 001

Card 2/2 mT

MELIKYAN, M.S. (Tbilisi).

Topical diagnosis and therapy of perivisceritis. Klin.med. 31 no.2:72 F
'53. (MLBA 6:5)
(Abdomen--Diseases)

MELIKYAN, N. A.

"Results of a Comparison of Polyclinic Diagnoses With Hospitals,"
Sov. Med., No. 5, 1948.

MELIK'YAN, N. M.

Mbr., Yerevan State Univ. im. V. M. Molotov, -1946-. "Anatomical Structure of Stalk of Plants as Influenced by the Duration of Diurnal Illumination," Dok. AN, 53, No. 8, 1946; "Anatomical Structure of Stem in Sunflower as Influenced by Period of Diurnal Illumination," Dok. AN, 53, No. 9, 1946.

Melikyan, N.M.

USSR / Cultivated Plants. Technical. Oleaginous.
Sugar-Bearing.

L-5

Abs Jour : Ref Zhur - Biol., No 6, March 1957, No 22786

Author : Araratyan, A.G., Melikyan, N.M.

Inst : Not given

Title : Wild Fatty-Oily Plants of Armenia.

Orig Pub : Sb. nauch. tr. Arm. s.-kh. in-ta, 1955, No 9, 195-213

Abstract : In search of new fatty raw materials for different industrial needs, the authors tested over 1,000 plant species for oil content of seeds and for the iodine number of the oil. The simple and rapid method of an oil spot in quite suitable, in the authors' opinion. Some plants were tested for oil for the first time. Families of boraginacea

Card : 1/2

USSR / Cultivated Plants. Technical. Oleaginous.
Sugar-Bearing.

L-5

Abs Jour : Ref Zhur - Biol., No 6, March 1957, No 22786

Abstract : (7 species), compositae (22), cruciferae (16), labiatae (21), ranunculaceae (7), solanaceae (6) were thoroughly tested. Three species were noted which had a very high iodine number: *echinocloa*, *Echinops sphaerocephalus* L. (180.5), Austrian flax (175.7), and buckthorn, *Rhamnus cathartica* L. (158.6).

Card : 2/2

MELIKYAN, N.M.

Some characteristics of male and female hemp plants [in Armenian with summary in Russian]. Nauch. trudy Erev. un. 54 pt.1:45-52 '56. (MLBA 10:4)

1. Kafedra fiziologii i anatomii rasteniy.
(Hemp) (Lignin)

MELIKYAN, N.M.

Anatomical variations and the amount of lignin in stems of
lodged and unlodged wheat plants. Nauch.trudy Erev.un. 64:
43-66 '58. (MIRA 11:12)

1. Kafedra fiziologii i anatomii rasteniy Yerevanskogo
gosudarstvennogo universiteta.
(Wheat) (Lignin)

MELIKYAN, N.M.; TSOVYAN, Zh.V.

Effect of the use of various fertilizers on the dynamics of lignin accumulation and structural changes in corn. Nauch. trudy Erev. un. 69 Ser. biol nauk no. 8:61-69 pt. 1 '59. (MIRA 14:4)

1. Kafedra fiziologii i anatomii rasteniy Yerevanskogo gosudarstvennogo universiteta.
(CORN (MAIZE)—FERTILIZERS AND MANURES)

MELIKYAN, N.M.; TSOVYAN, Zh.V.

Characteristics of the formation of the vegetative cones of
potato eyes in the Sevan region and the Ararat Plain. Izv.
AN Arm. SSR. Biol. nauki 16 no.7:85-94 J1 '63.

(MIRA 16:11)

1. Kafedra anatomii i fiziologii rasteniy biologicheskogo
fakul'teta Yerevanskogo gosudarstvennogo universiteta.

Hydrodynamics of the flotation phenomenon. I. Rise of single bubbles in a liquid medium. A. A. Medvedev, *Zhur. Priklad. Khim.* 29, 1703-1704 (1957). The flow of air bubbles through H_2O in vertical tubes was studied photographically. Tubes 14, 20, and 48 mm. in internal diam. and 2.0 and 8 m. long were used with bubbles of 8 different diam. from 6 to 45 mm. At low frequencies of bubble formation the velocity W of the air bubble was const. and independent of its diam. (cf. O'Brien et al., *C.A.* 30, (1957)) as long as the periphery of the spheroid approached the walls of the tube. With larger bubbles the spheroids became cylindrical. At low velocities W_0 (up to 10 cm./sec.) and at low heights H of the gas-liquid mixts. the exptl. values fell on the straight line $H = h(1 + (W/W_0)^2)$, where h is the initial height of the liquid before bubbling started. At higher values of W_0 the deviation from the theoretical increased with W_0 . The hydrodynamics of the process was represented by 2 currents: the upward rise of air and mixt. of air-liquid and the downward flow of the liquid. The neglect of the latter could account for the failure of theoretical relations applied to the treatment of air-lifts. The velocity of a rising bubble, normally measured in reference to the wall of the tube, in reality consists of the components W_0 and W_1 . The error is proportional to the diam. of the bubble and the frequency of bubble emission. Theoretical equations were derived indicating that the work of expansion is completely spent on overcoming friction during the process of rising; the loss of potential energy of the bubble rising during a period t due to the downward current of the liquid phase is equal to the work of expansion, $\int_0^H W_1 dt = W_1 H = (P_{atm} - P_{liq}) \Delta V$. I. Benicewitz

Melkyan, R. A.

Hydrodynamic character of rising bubbles. II. Hydro-
dynamic regimes of rising gas in a liquid layer. R. A. Melkyan. Zhuravskiy Khim. 10. 1975. 105-111. 11.
English. 12 pp. — An attempt is made to generalize different types of gas flow through liquid media as special conditions of hydrodynamic factors which are con-
sistent with the gas content in the fluid phase. The
character of the flow is dependent on the

greater in a column than in a tube. The values of h and h_0 are higher with $h = 50$ cm. than with $h = 10$ cm. (at higher values of h the differences are masked).
With regard to the gas rates, the condition defined as a
highly turbulent flow is established for the column flow.

h
h₀

AZIZYAN, A.G.; MELIKYAN, R.A.; SMIRNOV, N.I.

Hydrodynamics of bubbling processes. Report No.1: Rate of mass diffusion of gas bubbles in a liquid medium as a function of the nature and depth of the liquid and the dispersion and velocity of the gas. Izv. AN Arm. SSR, Ser.tekh.nauk 14 no.2:31-42 '61.
(MIRA 14:3)

(Bubbles)

AZIZYAN, A.G.; MELIKYAN, R.A.; SMIRNOV, N.I.

Hydrodynamics of bubbling processes. Report No.2: Derivation of equations determining mass emersion of gas bubbles in a liquid medium in case of bubbling and mixed processes. Izv. AN Arm. SSR. Ser. tekhn. nauk 14 no.3:59-69 '61. (MIRA 14:8)
(Bubbles)

CHUKHADZHYAN, G.A.; MELIKYAN, R.A.; BABAYAN, Sh.A.; VARTANYAN, S.A.

Condensation of formaldehyde with acetylene. Synthesis of
2-butyne-1,4-diol. Izv. AN Arm.SSR. Khim.nauki 14 no.5:445-449
'61. (MIRA 15:1)

1. Tsentral'naya zavodskaya laboratoriya zavoda imeni S.M.
Kirova i Institut organicheskoy khimii AN Armyanskoy SSR.
(Butynediol)

VARTANYAN, S.A.; CHUKHADZHYAN, G.A.; MELIKYAN, R.A.; BABAYAN, Sh.A

Laboratory method of preparing primary-secondary and primary-tertiary acetylenic glycols. Izv.AN Arm.SSR.Khim.nauki 15 no.1:45-51 '62.

(MIRA 15:7)

1. TSentral'naya zavodskaya laboratoriya zavoda imeni S.M. Kirova i Institut organicheskoy khimii AN Armyanskoy SSR.
(Glycols)

L 36290-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM

ACCESSION NR: AP5008142

S/0286/65/000/005/0021/0021

AUTHORS: Melikyan, R. A.; Yegishyan, V. G.; Turabova, M. G.

TITLE: A method for obtaining chloroprene. Class 12, No. 168685 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 21

TOPIC TAGS: chloroprene, vinyl acetate, hydrogen chloride, copper chloride, amine, formamide, dimethylformamide

ABSTRACT: This Author Certificate presents a method for obtaining chloroprene by the interaction of vinyl acetylene and hydrogen chloride. The reaction is carried out at a high temperature in the presence of a catalyst of hydrogen chloride and copper chloride in a solution. To increase the yield of the final product, the catalyst is used in a solution of amine or replaced oxygen-bearing amines, such as formamide, dimethylformamide, or methylpyrrolidon.

ASSOCIATION: none

SUBMITTED: 26Feb64

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 1/1 10

ADZHEMYAN, E.; MELIKYAN, T. [deceased]

Electrostatic spray painting and heat-radiation drying in
the electric machinery industry of Armenia. Prom.Arm. 5
no.8:27-29 Ag '62. (MIRA 15:8)

1. Arayanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta elektromekhaniki.
(Erivan--Electric equipment industry)
(Spray painting, Electrostatic) (Infrared drying apparatus)

MELIKYAN, V.G., nauchnyy sotrudnik

Vibrio abortion in sheep and its control. Veterinariia 40 no.7:
35-38 J1 '63. (MIRA 16:8)

1. Armyanskiy nauchno-issledovatel'skiy institut zhivotnovodstva
i veterinarii.

(Armenia--Abortion in animals)
(Armenia--Sheep--Diseases and pests)

^{Ye. L.}
MELIKYAN, Ye. and A. Ginzburg

"From the experience of the clinic of the Yerevan Zooveterinary Institute"

SOURCE: Veterinariya, Vol 26, No 7, 1949, p 28

MELIKYAN, YE. L.

Melikyan, Ye. L. -- "Coccidiosis of Farm Animals in Armenian SSR." Cand Vet Sci, Yerevan Zooveterinary Inst, 20 Jan 54. (Kommunist (Yerevan), 8 Jan 54)

SO: SUM 168, 22 July 1954

MELIKYAN, Ye. L.

USSR/Medicine - Veterinary, Coccidia; Eimeria

Card 1/1

Author : Melikyan, Ye. L., Scientific Associate

Title : Survival time of coccidia under environmental conditions

Periodical : Veterinariya, 31, 43-44, May 1954

Abstract : The causes for coccidiosis in sheep and goats, and economic loss caused by the genus Eimeria of the Sporozoa order of parasites in some rayons of the Armenian SSR is discussed. Sporelike, resistant forms known as oocysts were found in various stages of development in the soil of pasture lands, ponds, manure, etc. Oocysts can live in their immediate environment for more than a year. The principles of control are essentially the same as for all domesticated animals and their parasites.

Institution : Armenian Scientific-Research Veterinary Institute

Submitted :

MELIKYAN, Ye. L.

"Coccidiosis of Sheep and Goats in the Armenian SSR." Cand Vet Sci,
Inst of Animal Husbandry, Ministry of Agriculture and Procurement, Armenian
SSR, Yerevan, 1953. (RZhBiol, No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

MELIKYAN, Ye.L., kandidat veterinarnykh nauk.

Pathologomorphological changes in sheep and goats in coccidiosis.
Veterinariia 33 no.4:34-36 Ap '56. (MLRA 9:7)

1.Yerevanskiy, Ye.L., kandidat veterinarnykh nauk. ?
(Sheep--Diseases) (Goats--Diseases) (Coccidiosis)

USSR/Microbiology - Microbes Pathogenic for Man and Animals.
Brucellae

F

Abs Jour : Ref Zhur Biol., No 22, 1958, 99431

Author : Boyakhchyan, A.D., Vardanyan, G.A., Malikyan, Ye.L.,
Ter-Ovanesova, O.G.

Inst : Yerevan Zootechnical Veterinary Institute

Title : Some Data on the Dynamics of the Serological Reactions
in a Non-Secluded Brucellosis Isolator.

Orig Pub : Tr. Yerevansk. Zootekhn. vet. in-ta, 1957, vyp. 21, 203-
207

Abstract : The dynamics of the serological reactions were studied
in cattle affected with brucellosis on 1 non-secluded
farm with brucellosis where, in the course of 1952-1956,
cattle affected with brucellosis were kept. There were
78 positively reacting animals prior to the investigation

Card 1/2

- 84 -

MELIKYAN, E. L., AGABABYAN, M. I. and VARDANYAN, G. A.

Bolezni sel'skokhoziaistvennykh ptits i ikh profilashtika
(Diseases of agricultural fowls and their prophylaxis). Erevan',
Aipetrat, 1959, 190 pages with illustrations, Price 3 r. 20 k. bound;
1,000 copies. In the Armenian language.

BOYAKHCHYAN, A. B.; AGABABYAN, M. M.; BARDANYAN, G. A.; MELIKYAN, Ye. L.;
TEROVANESOVA, O. G.; AREVSHATYAN, M. S.

Dynamics of the thermoallergic reaction in experimental brucel-
losis in rabbits with the application of radioactive isotopes.
Izv. AN Arm. SSR. Biol. nauki 15 no.4:73-80 Ap '62.
(MIRA 15:7)

1. Kafedra epizootologii Yerevanskogo zooveterinarnogo instituta.

(BRUCELLOSIS IN ANIMALS) (RADIOACTIVE TRACERS)

MELIKYAN, Yeznik Levonovich

[Little-known communicable diseases of farm animals] [Malo-
izuchennye zaraznye bolezni sel'skokhoziaistvennykh zhivot-
nykh. Erevan, Armianskoe gos. izd-vo] 1963. 157 p. [In
Armenian] (MIRA 17:4)

MELIKYANTS, R.V.; RABINOVICH, B.V.

Using automatic compensators in controlling electric parameters of electrolytic series. Sbor.mat.po avtom.proizv.prets.i disp. no.5: 94-100 '60. (MIRA 14:4)

1. Konstruktorskoye byuro "TSvetmetavtomatika."
(Electronic control) (Electrolysis)

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSIES AND PROPERTIES INDEX																			
ca 21 Determination of quality of carbon black. M. M. Melikzade and T. M. Ivanova. <i>Azerbaidzhanets Neft-Jurnal</i> 26, No. 10, 11-12(1947).—New methods are suggested for detn. of grit, ash, and moisture in C black since the methods now used give erratic results. For detg. grit an app. was devised which eliminates variable results due to differences in stiffness of brush, hand pressure, etc. Ash is detd. on 8-10 g. samples since the previously used 2-g. samples gave results within exptl. error. For detn. of moisture the temp. is raised from 105-10° to 125-30° and the time of drying shortened from 2 hrs. to 15 min. M. Hosh																			
ASS-ELA METALLURGICAL LITERATURE CLASSIFICATION										SIGN NUMBER									
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MELIK-ZADE, Mir-Kyazim Mekhti ogy; ZIZIN, Valentin Grigor'yevich;
RAMAZAN-ZADE, M.G., redaktor; SHTEYNQEL', A.S., redaktor
izdatel'stva

[Raman spectra and their use in petroleum analysis] Spektry
kombinatsionnogo rasseliianiia sveta i ispol'zovanie ikh v neftia-
nom analize. Baku, Azerbaidzhanskoe gos.izd-vo neft. i nauchno-
tekhn.lit-ry, 1956. 174 p. (MLRA 10:9)
(Raman effect) (Petroleum)

MELIK-ZADE, M.

50V/1762

21 (B)

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po fiziko-khimii i stabil'nym izotopam i isklucheniy v narodnom khoz-

ystve i nauka Moscow, 1957.
Trudy... Mashinostroyeniye i Obitatsoyeniye (Transactions of the
All-Union Conference on the Use of Radioactive and Stable Isotopes
and Radiation in the National Economy and Science, Machine and In-
strument Manufacturing, Moscow, Iss-vo AN SSSR, 1956. 358 p.
A 503 copies printed.

Sponsoring Agencies: USSR. Otkrytoye upravleniye po izpol'zovaniyu
Akademicheskaya i Alkademicheskaya

Editorial Board of Set: V.I. Dikunin, Academician (Resp. Ed.), M.F. Shumilovskiy (Deputy Resp. Ed.), Th. S. Zaslavskiy (Deputy Resp. Ed.), L.K. Tashchenko, B.I. Verkhovskiy, S.T. Masarov, L.I. Petrusheva (Ed.), L.K. Tashchenko (Secretary).

34. of Publishing House: P.M. Polymiro; Tech. Ed.: T.F. Polymiro.
and N.O. Zolovinnaya (secretary).
FURROK: This book is intended for specialists in the field of ma-
chine and instrument manufacture who use radioactive isotopes in
chemical, metallurgical, ceramic, electrical, and processess.

COVERAGE: This collection of papers covers a very wide field of the utilization of the various methods in industrial research and control techniques. The topic of this volume is the use of radioscopes in the radioactive and instrument-manufacturing industry. The authors in the papers discuss the applications of radioscopes in the study of metals and alloys, problems of corrosion and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radi measuring devices, radiation of industrial processes, recording safety devices, radiation quality control, flammeters, level gauges, contributions of various countries, etc. These papers were presented at the All-Union Soviet Institute Machine Corporations. They were published as Transactions of the All-Union Conference on the Use of Radioscopes and Stable Isotopes in Industry and Agriculture, Moscow, April 18, 1956. No personalia are mentioned.

References are given to:
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Yakovlev, D.I., G.I. Zolotarev, V.I. Golov, V.P. Karmachovskiy and Yu. G. Kochetov (presenting) machine-aided technology of automobile mobility research - Central Scientific Research Institute for Automobiles and Automobile Engines, Mobile Research Laboratory for the Study of the Effect of Dust in Air used test Laboratory for the Study of the Effect of Dust in Engine

the type of Air Filter on the rear of ration sumps. The
Maltzida, M., (Aserbydhanaky cauchno-isalderat) sky instali-
tute po neferpovozhu - Aserbydhan Scientific Research Insti-
tute for Petroleum Refining). Apparatus for the study of film
formation on friction surfaces

96

89
Kalinovsky, O. Ye. (Central'nyy nauchno-issledovatel'skiy diel'-
nyy institut - Central Diesel Research Institute). Scintillation
Counter for the Measurement of Radioactivity in Liquids

Sarakhov, M. P. (Institut mashinovedeniya AN SSSR - Institute of Mechanical Engineering, Academy of Sciences, USSR). Research on Metal Cutting. 94

Metals Cutting
Lazebnik, B.D. (Institut mashinovedeniya AN SSSR - Institute of Mechanical Engineering, Academy of Sciences, USSR). Study of the Wear of Hard-Alloyed Cutting Tools. 1971. 102

Yakovlev, G.M. (Beloruskiy politsimicheskii Institut - Male-
russian Polytechnical Institute). Study of the Wear of Cutting
Tools

MELIK-ZADE, M.M.; KHANLAROVA, A.G.; MUSAYEV, M.R.; SUBKHANVERDIKHANOVA,
V.V.; FARADZHEV, Kh.F.

Radioisotope evaluation of the stability of the AzNII-7 additive
in Diesel oil. Sbor.trud.AzNII NP no.2:279-287 Ag '58.
(MIRA 12:6)

(Diesel fuels--Additives)
(Radioisotopes)

MELIKZADE, M.M.; SUBKHANVERDIKHANOVA, V.V.

Infrared spectroscopic and electron microscope methods in the study of petrochemical products [in Azerbaijani with summary in Russian]. Azerb. neft. khoz. 37 no.7:34-36 J1 '58.(MIRA 11:9)
(Petroleum products--Spectra) (Electron microscopy)

NASIROV, A.B.; ASHUMOV, G.G.; NAMAZOV, I.I.; MELIK-ZADE, M.M.

Studying the individual hydrocarbons of the gasoline fraction
obtained from the Balakhan' heavy oil [in Azerbaijani with
summary in Russian]. Azerb.neft.khoz. 37 no.8:40-42 Ag '58.
(Hydrocarbons) (Gasoline) (MIRA 11:11)

MELIKZADE, H.M.

Corrosion protection of metals in the production of aluminum
silicate catalysts. Azerb. neft. khoz. 37 no.9:38-39 S '58.
(MIRA 11:12)

(Aluminum silicates) (Steel—Corrosion)
(Bituminous materials)

MELIK-ZADE, M.M.; BUZOVA, N.G.; MUSAYEV, M.R.; SAFARALIYEVA, I.G.; ALIYEV, R.G.

Investigation of the structure of coke deposits on an aluminosilicate catalyst. Sbor.trud.Az NII NP no.4:81-88 '59. (MIRA 15:5)

(Aluminosilicates)

MELIK-ZADE, M.M.; KHANLAROVA, A.G.; SUBKHANVERDIKHANOVA, V.V.; FARADZHEV,
Kh.F.; KERIMBEKOV, A.V.

Physicochemical investigation of dispersing and stabilizing prop-
erties of some additives. Sbor.trud.Az NII NP no.4:191-200 '59.
(MIRA 15:5)

(Lubrication and lubricants--Additives)

KHANLAROVA, A.G.; MELIK-ZADE, M.M.; FARADZHEV, Kh.F.; SUBKHANVERDIKHANOVA,
V.V.; KHANLAROV, G.G.

Using tagged atoms for determining the filming effect of additives
in lubricants. Azerb.neft.khoz. 38 no.11:36-39 N '59.
(MIRA 13:5)

(Lubrication and lubricants)

ALIYEV, Kyamal Ali ogly. kand.tekhn.nauk; MELIK-ZADE, M.M., dotsent.
kand.tekhn.nauk, red.; RASHEVSKAYA, T.A., red,izd-va

[Gas appliances for domestic use] Bytovye gazovye pribory.
Baku, Azerbaidzhanskoe Gos.izd-vo neft. i nauchno-tekhn.lit-ry,
1960. 170 p. (MIRA 13:12)

(Gas appliances)

MELIK-ZADE, M.M.; KHANLAROVA, A.G.; SUBKHANVERDIKHANOVA, V.V.;
FARADZHEV, Kh.F.

Use of radioisotopes in evaluating the characteristics of
film formation by oil additives on friction surfaces. Azerb.
khim.zhur. no.2:127-134 '60. (MIRA 14:8)
(Lubrication and lubricants--Additives)

MELIKZADE, M.M.; MUSAYEV, M.R.

Catalytic cracking of normal hexadecane on al aluminosilicate
catalyst. Azerb.khim.zhur. no.3:43-47 '60. (MIRA 14:8)
(Hexadecane) (Cracking process)

MELIKZADE, M.M.; MUSAYEV, M.R.

Role played by individual hydrocarbons in the formation of
coke on an aluminosilicate catalyst under the conditions of
catalytic cracking. Azerb.khim.zhur. no.4:17-20 '60.

(MIRA 14:8)

(Hydrocarbons) (Coke) (Cracking process)

S/081/61/000/013/017/028
B110/B205

AUTHORS: Khanlarova, A. G., Melik-zade, M. M., Faradzhev, Kh. F.,
Subkhanverdikhanova, V. V.

TITLE: Study of the effect of the nature of the oil medium upon the
formation of a protective film by the tagged admixtures
A₃HNM-7 (AzNII-7) and ЦНАТИМ-339 (TsIATIM-339)

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 13, 1961, 526, abstract
134302 (Azerb. neft. kh-vo, 1960, no. 7, 34 - 36)

TEXT: The authors studied the formation of anticorrosion films (protective
films) on lead bronze under the action of 3% oil solutions of A₃HNM-7
(AzNII-7) and ЦНАТИМ-339 (TsIATIM-339) admixtures tagged with radio-
isotopes. The experiments were carried out with a lead bronze - steel
pair at 180°C within 600 min, using a method previously described (RZhKhim,
1960, No. 13, 54355). Д-11 (D-11), СУ (SU), and МТ-16 (MT-16) oils with
different degrees of purity, fractions of hydrocarbons of different
groups, separated from these oils by adsorption on silica gel, as well as
dinonyl benzene and trihexyl benzene were used as oil media. The data

Card 1/2

Study of the effect...

S/081/61/000/013/017/028
B110/B205

presented illustrate the great effect of the chemical nature of the oil medium on the formation of anticorrosion films and on the corrosive wear of the metal. Above all, the data indicate that in naphthene-paraffin fractions and oils the protective film formed is larger and wear is lower than in aromatic hydrocarbon fractions and in pure aromatics. [Abstracters note: Complete translation.]

Card 2/2

S/081/61/000/008/011/017
B10/B203

AUTHORS: Melikzade, M.M., Musajev, M.R., Sefereliyeva, L.h.

TITLE: Study of the mechanism of catalytic cracking of tagged n-nyl benzene on an alumosilicate catalyst

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 8, 1961, 479, abstract 8M179 (8M179) (Azerb. neft. kh-vo, 1960, no. 8, 33 - 35)

TEXT: The authors studied the mechanism of catalytic cracking of n-nyl benzene (I) with a C^{14} atom in the side chain and of coke deposited on the catalyst. They give the scheme of the microsynthesis of I. At 450°C, the weight velocity of 1 hr., and a test time of 1 hr⁻¹ on a synthetic alumosilicate catalyst, the amount of cracked portion was found to be 35 - 40% for I. The considerable amount of hydrocarbons separated out proves the high degree of splitting of the side chain of I. The main products of cracking of I are benzene (almost not radioactive) and toluene (this fraction was strongly radioactive). The decomposition products of the chain of (I) are apparently concentrated in the coke

Card 1/2

Study of the mechanism...

S/081/61/000/008/011/017
B110/B203

which is highly radioactive. 8 references. [Abstracter's notes: Complete translation.]

Card 2/2

S/123/61/000/008/007/013
A004/A104

AUTHORS: Khanlarova, A.G., Melik-zade, M.M., Paradzhev, Kh.F., Subkhanverdi-khanova, V.V.

TITLE: Tagged atoms in the investigation of the anticorrosion effect of the AzNII-7 (AzNII-7) additive

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 8, 1961, 107, abstract 8B803 ("Azerb. نفت. kh-vo", 1960, no. 10, 40 - 41)

TEXT: With the aid of the tagged atoms C^{14} and C^{45} the authors studied the anticorrosion effect of the AzNII-7 additive to diesel oil in a lead bronze-steel friction couple. It is shown that the mentioned additive is a corrosion inhibitor. The phenol ring and the metal of the multifunctional AzNII-7 additive participate in the formation of an anti-corrosion film on the lead bronze. The test results are compiled in 2 tables.

N. Savina

[Abstracter's note: Complete translation]

Card 1/1

24825
S/081/61/000/011/026/040
B103/B202

5 3300

AUTHORS:

Melikzade, M. M., Musayev, M. R., Safaraliyeva, I. G.

TITLE:

Study of the cracking reaction of ordinary amyl benzene with tagged carbon atom in the ring on a synthetic aluminosilicate catalyst

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 11, 1961, 480 - 481, abstract 11M174(11M174). ("Azerb. neft. kh-vo", 1960, no. 11, 37 - 38)

TEXT: Experiments are described which were conducted when studying catalytic cracking of ordinary amyl benzene which contained C¹⁴ in the benzene ring, on an industrial aluminosilicate catalyst consisting of spherules. The data obtained permit conclusions on the participation of the benzene ring and the side chain of ordinary amyl benzene in the formation of coke on the catalyst under conditions of catalytic cracking. Catalytic cracking was produced under the following conditions: temperature 450°C, weight velocity 1 per hr, duration of the experiment 1 hr. 10.3 g catalyst and 10.4 tagged ordinary amyl benzene with a specific

Card 1/2

24825

S/081/61/000/011/026/040
B103/B202

Study of the cracking reaction....

relative activity of 276 466 imp/min per g and a relative total activity of 2 866 380 imp/min were used for the experiment. 9 g (85.5 %) of a liquid catalyst were obtained. The amount of gas and coke on the catalyst as well as the losses were 1.4 g (13.5 %). It was demonstrated that the main activity of the converted part of the ordinary amyl benzene tagged in the ring, passes into the benzene and toluene fraction and into the residue of the liquid catalyzate after fractional distillation. The activity of coke and gaseous products was insignificant. The high activity of benzene proves that it is formed as a result of a direct rupture of the bond between ring and side chain. The considerable activity of toluene justifies the assumption that toluene is a product of the alkylation of active benzene by fragments the side chain. The higher specific activity of the catalyzate residue after fractional distillation as compared to this value for the initial ordinary amyl benzene indicates that the residue is a mixture of high-molecular components in which an active benzene ring participates to a higher degree. [Abstracter's note: Complete translation]

Card 2/2

KHANLAROVA, A.G.; MELIK-ZADE, M.M.; FARADZHEV, Kh.F.; SUBKHANVERDIKHANOVA,
V.V.

Study by the tagged atoms method of the dynamics of the formation of
a protective film on metals with Az NII-7 and TSIATIM-339 additives.
Azerb. neft. khoz. 39 no.1:39-41 Ja '60. (MIRA 14:8)
(Corrosion and anticorrosives)

S/195/61/002/005/019/027
E030/E485

AUTHORS: Melikzade, M.M., Musayev, M.R., Buzova, N.G.,
Safaraliyeva, I.G.

TITLE: The role of the side-chain and benzene nucleus of
n-amylobenzene in the deposition of coke in catalytic
cracking conditions

PERIODICAL: Kinetika i kataliz, v.2, no.5, 1961, 754-757

TEXT: C^{14} atoms either in the side-chain or the nucleus of
n-amylobenzene have been used to elucidate their relative
importance in coke formation. Since little is known in detail
about coke formation, a pure hydrocarbon was chosen. The
catalyst was alumino-silica, of 2 to 3 mm pellet size. Reactor
temperature was $450^{\circ}C$ with 1/v/v hr space velocity, and the
reaction time taken was 1 hour. The amylobenzene was synthesized
from amylobenzene; the C^{14} atoms (from $C^{14}O_2$ obtained from
 $BaC^{14}O_3$) were introduced either as valerianic acid or in benzene
during the alkylation stage. Typical yields consisted of 10 to
11% gas, 84 to 86% liquid and 4 to 5% wt coke. Experiments with
 C^{14} in the side-chain were done on a sample of 1.275 g marked feed

Card 1/3

The role of the side-chain ...

S/195/61/002/005/019/027
E030/E485

and 28.725 g unmarked feed. The activity of the liquid product showed that toluene is formed not by breaking the bond between the first and second atoms of the side-chain but by alkylation of benzol with fragments of products of cracked side-chains. The high activity of the coke showed the importance of the side-chain in coke formation. Similar experiments with C^{14} in the benzene nucleus showed that high molecular weight liquid products are formed both from benzene nucleus and from the side-chain, but that coke formation from the side-chain is an order of magnitude greater than from the nucleus. Similar results were obtained on experiments with other pure hydrocarbons (n-hexadecane, mixture of isoamylenes and benzene). The authors studied also the structure of the catalyst after cracking. Adsorption isotherms of the catalyst over methyl alcohol were measured after 50 hours of cracking of benzene, n-hexadecane and isoamylenes mixture. They showed that the fraction of wide pores (above 30 Å) fell from 18 to 3%, but that of narrow pores increased. From the weight of coke deposited, it is clearly formed in multimolecular layers in the wide pores. There are 1 figure and 4 tables.

Card 2/3

The role of the side-chain ...

S/195/61/002/005/019/027
E030/E485

ASSOCIATION: Institut neftekhimicheskikh protsessov AN Azerb SSR,
Baku (Institute of Petrochemical Processes
AS Azerbaydzhanskaya SSR, Baku)

Card 3/3

ASHUMOV, G.G.; NASIROV, A.B.; MELIK-ZADE, M.M.

Study of the individual hydrocarbon composition of the gasoline
fraction from Siazan oil. Azerb. neft. khoz. 40 no.1:37-38
Ja '61. (MIRA 14:8)

(Siazan' region--Hydrocarbons)

KHANLAROVA, A.G.; MELIKZADE, M.M.; FARADZHEV, Kh.F.

Interrelation between the protective film of additive AzNII-7 and the products of aging of lubricants studied by the tracer method. Azerb. khim.zhur. no.4:171-176 '63. (MIRA 17:2)

VOSKOBOYENKO, A.; LEBEDEV, D.; KALITA, V. (Krasnodarskiy kray, Stanitsa Kurganskaya); IVANOV, P.; MELIMEVKER, D.; TRIFONOV, N., inzh.

Suggested, created, introduced. Izobr. i rats. no.9:16-17 S
'61. (MIRA 14:8)

1. Inzhener po ratsionalizatsii, Ussuriyskiy lesozavod (for Voskoboyenko). 2. Chlen soveta Nauchno-tekhnicheskogo obshchestva g. Sochi (for Lebedev). 3. Direktor Mukachevskoy remontno-tekhnicheskoy stantsii, Zakarpatskoy oblasti (for Ivanov). 4. Direktor pryadil'no-tkatskoy fabriki, g. Chelyabinsk (for Melimevker). 5. Trest "Chuvashpetsstroy", g. Cheboksary (for Trifonov).

(Technological innovations)

OSTROVITYANOV, Emiliy Mikhaylovich; MELIN, Ivan Vasil'yevich; KIVROVA,
Ye.P., inzh., retsenzent; MURAV'YEV, M.I., inzh., nauchnyy red.;
DUKHOVNIY, F.N., red.; KNAKNIN, M.T., tekhn.red.

[Adjustment and regulation of basic shoe machinery] Tekhnolo-
gicheskaya regulirovka osnovnykh obuvnykh mashin. Moskva, Gos.
nauchno-tekhn.isd-vo lit-ry po legkoi promyshl.. 1959. 251 p.
(MIRA 13:5)

(Shoe machinery)

KONONENKO, T.V.; MELINA, N.I.; ANTIPOVA, N.P.; ROZHKOVA, V.V.; VASIL'YEVA,
V.V.

Using new synthetic fibers in the woolen industry. Tekst. prom. 18
no.8:10-14 Ag '58. (MIRA 11:10)
(Textile fibers, Synthetic) (Woolen and worsted manufacture)

MELINA, N.I., inzh.; KORNEYEVA, G.M., starshiy tekhnik

Dyeing of polyacrylonitrile fibers. Nauch.-issl.trudy TSMNIShersti
no.18:144-153 '63. (MIRA 18:1)

VOROB'YEV, N.N., red.; GNEDENKO, B.V., red.; DOBRUSHIN, R.L., red.;
 DYNKIN, Ye.B., red.; KOLMOGOROV, A.N., red.; KUBILYUS, I.P.
 [Kubilius, I.P.], red.; LINNIK, Yu.V., red.; PROKHOROV, Yu.V.,
 red.; SMIRNOV, N.V., red.; STATULYAVICHYUS, V.A. [Statuliavicius,
 V.A.], red.; YAGLOM, A.M., red.; MELINENE, D., red.; PAKERITE, O.,
 tekhn. red.

[Transactions of the Sixth Conference on Probability Theory and
 Mathematical Statistics, and of the Colloquy on Distributions
 in Infinite-Dimensional Spaces] Trudy 6 Vsesoiuznogo soveshcha-
 nia po teorii veroiatnostei i matematicheskoi statistike i kol-
 lokviuma po raspredeleniam v beskonechnomerrykh prostranstvakh.
 Vilnius, Palanga, 1960. Vil'nius, Gos.izd-vo polit. i nauchn.
 lit-ry Litovskoi SSR, 1962. 493 p. (MIRA 15:12)

1. Vsesoyuznoye soveshchaniye po teorii veroyatnostey i matema-
 ticheskoy statistike i kollokviuma po raspredeleniyam v besko-
 nechnomernykh prostranstvakh. 6th, Vilnius, Palanga, 1960.
 (Probabilities--Congresses) (Mathematical statistics--Congresses)
 (Distribution (Probability theory))--Congresses)

MELINKOV, S.A., MAKHON'KOVA, A.G.

Pathomorphological study of the western variant of spring and summer encephalitis [with summary in French]. Zhur.nevr. i psikh. 85 no.11:1349-1353 N'58 (MIRA 12:1)

1. Kafedra nervnykh bolezney (zav. - prof. Ye K. Sepp [deceased])
I Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova.
(ENCEPHALITIS, EPIDEMIC, pathology
histopathol. of western types of spring & summer
encephalitis (Rus))

MELINSHIN, S., vrach, deputat Truskavetskogo gorodskogo Soveta; SMIYAN, I.,
kand.med.nauk (Truskavets); FEDYUSHKO, M., vrach (Truskavets);
BOCHKO, L. (Truskavets)

Let a pearl have a worthy setting. Okhr. truda i sots. strakh.
5 no.9:20-22 S '62. (MIRA 16:5)

1. Chlen Truskavetskogo gorodskogo komiteta professional'nogo
soyuza meditsinskikh rabotnikov (for Smiyan). 2. Predsedatel'
mestnogo komiteta sanatoriya No.4, Truskavets (for Fedyushko).
3. Spetsial'nyy korrespondent zhurnala "Okhrana truda i
sotsial'noye strakhovaniye" (for Bochko).

(TRUSKAVETS—HEALTH RESORTS, WATERING PLACES, ETC.)

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Thermal insulation in refrigeration. p.8.

(BUDOWNICTWO PRZEMYSŁOWE. Vol. 6, No. 6, June 1957. Warszawa, Poland)

SO.: Monthly List of East European Accessions (EEAL) L C. Vol. 6, No. 10, October 1957. Uncl.

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no.52:10 28 D '60.

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Freons, their properties and use. Przegl techn 85 no.4:8 26 Ja '64.

MELINSKI, Zdzislaw, dr

Possibilities of producing Freons in Poland. Przegl techn
85 no. 30: 5 26 J1 '64.

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Jak człowiek zdobył przestworza. Warszawa, Iskry, 1954. 163 p. (How man conquered space. illus., diagra., facsims., footnotes, tables)

SO: Monthly list of East European Accessions List, ENAL, LC, Vol. 4, No. 11, November 1955, Uncl.

MELION, Z.

A winged career of jet propulsion, p. 356. (HORYZONTY TECHNIKI, Warszawa, Vol. 7, no. 7, July 1954.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

SANIN, A.A.; MELIORANSKIY, A.S.; LOTOVA, N.A.

Voltage pulse amplitude analyzer with brief resolving time. Vest.
Mosk. un.10 no.12:87-92 D '55. (MLRA 9:5)

(Pulse techniques (Electronics))

MELIORANSKIY A.S.
MELIORANSKIY, A.S.
SUBJECT USSR / PHYSICS
AUTHOR ESTULIN, I.V., KALINKIN, L.F., MELIORANSKIY, A.S.
TITLE The Gamma Quanta emitted by the Nuclei of J, Rh and Co on the occasion of the Capture of Thermal Neutrons.
PERIODICAL Zhurn. eksp. i teor. fiz., 31, fasc. 5, 886-887 (1956)
Issued: 1 / 1957

CARD 1 / 2

PA - 1786

The present work determines the energies and absolute intensities of the γ -quanta mentioned in the title with from 50 to 600 keV. For this purpose a luminescence spectrometer with a cylinder-shaped NaJ(Tl)-crystal (height 9 mm, diameter 28 mm) was used. As a source of thermal neutrons a physical test reactor with heavy water was used. From the horizontal channel in the shield of the reactor a well-collimated neutron bundle emerged, and in the center of the bundle the target made of the substance to be investigated was located. Under the target there was a NaJ(Tl)-crystal with a photoelectric amplifier. On the occasion of the measuring of the γ -rays produced on the occasion of neutron capture, the measuring results obtained in the case of an opened bundle of thermal neutrons (N_0) were compared with those obtained when the output of the neutron collimator was covered by means of a lid of $B_4C(N_1)$. The effect (N) produced by the thermal neutrons on the target is equal to the difference of these two results: $N = N_0 - N_1$. In the spectra of the investigated targets the photopeaks of soft γ -quanta (emitted by the nuclei on the occasion of the capture of thermal neutrons) rise above the background of the momenta originating from harder γ -gamma quanta.

Žurn.eksp.1 teor.fis,31,fasc.5,886-887 (1956) CARD 2 / 2

PA - 1786

On the occasion of the capture of thermal neutrons by iodide nuclei, γ -quanta with $E = 135 \pm 4$ keV were noticed which had escaped the attention of other authors. The results of such a test are shown in form of a diagram in which the photopeak caused by γ -quanta with 135 keV is distinctly visible. The intensity of these gamma quanta is $n = 30$ per 100 captures of thermal neutrons. Other much smaller peaks are due to the apparatus.

On the occasion of the capture of thermal neutrons by Rh nuclei 4 discrete lines with the energies $E_1 = 217 \pm 4$; $E_2 = 176 \pm 4$; $E_3 = 133 \pm 4$ and $E_4 = 96 \pm 4$ keV were observed. Their intensities per 100 acts of capture of thermal neutrons are $n_1 = 9,3$; $n_2 = 18$; $n_3 = 8$ and $n_4 = 16$. The latter values have an accuracy of 15-20%. The lines found can not be connected with the activation of the target because they differ as to the energy of the γ -quanta of the Rh^{104} isomeres. The γ -lines found here correspond to the transitions between these levels. On the occasion of capture of thermal neutrons by Co-nuclei, γ -quanta with the energies $E_1 = 276$ keV and $E_2 = 226$ keV and with the same intensity of about 20 γ -quanta per 100 captures of neutrons were noticed.

INSTITUTION: Moscow State University.

MELIORANSKIY, A. S.

✓ 10757 14
SOFT X-RAYS FROM THE CAPTURE OF THERMAL NEU-
TRONS BY NUCLEI. L. V. Eselkin, L. F. Kalinski, and A. S.
Melioransky (Moscow State Univ.). Nuclear Phys. 4, 91-
111 (1967) Aug.

A luminescent spectrometer was used to measure the
excitation and absolute intensities of the γ quanta emitted by
the nuclei ^{10}B , $^{10}\text{B}^{10}$, and H^{10} nuclei following the
capture of thermal neutrons. The results of the measurements
are presented. The energy ranges of the γ quanta emitted
from the nuclei excited states of the investigated
nuclei. A description of the apparatus and method of mea-
surement is presented. (auth)

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MELIORANSKIY, A. S.

Distr: 4E3d

3330 19 19 19
GAMMA QUANTA EMITTED BY ^{19}Ir AND ^{19}Au NUCLEI IN
THERMAL NEUTRON CAPTURE. I. V. Estulin, I. P.
Kalinin, and A. S. Melioranski (Moscow State Univ.).
Soviet Phys. JETP 4, 752-4 (1957) June.

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MELIORANSKIY, A.S.

56-5-7/55

AUTHOR
TITLE

ESKULIN, I.V., KALINKIN, L.F., MELIORANSKIY, A.S.
The Soft γ -Radiation Emitted By Nuclei at the Capturing of
Thermal Neutrons.

PERIODICAL

(Myagkoye γ -izlucheniye, ispuskayemoye yadrami pri zakhvate
teplovykh neytronov.-Russian)
Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 32, Nr 5, PP 979-
992 (USSR)

ABSTRACT

The paper under review describes the measurement of the energy
and of the absolute yields of the γ -quanta (in the energy in-
terval from 50 K keV to 500 keV) which are emitted by nuclei
at the capturing of thermal neutrons. These measurements were
conducted by means of a monocrystal luminescence spectrometer.

The first chapter of the paper under review deals with the
geometrical conditions of the experiment and of the luminescence
spectrometer. In this experiment, a physical experimental reac-
tor with heavy water was used as source for the neutrons. The
collimated bundle of the thermal neutrons, brought out of the
protections of the reactor, had an intensity of $\sim 10^7$ neutrons/
cm² sec. In the luminescence spectrometer a photoelectric ampli-
fier C with a cylindrical NaJ(Tl) crystal was used.

CARD 1/3